UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/738,433	12/15/2000	Richard A. Baker	SAA-35-1	9556

23569 7590 11/03/2006

SQUARE D COMPANY
LEGAL DEPARTMENT - I.P. GROUP
1415 SOUTH ROSELLE ROAD
PALATINE, IL 60067

EXAMINER	
VU, THONG H	

ART UNIT	PAPER NUMBER
2142	

DATE MAILED: 11/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/738,433	BAKER ET AL.	
	Examiner	Art Unit	
	Thong H. Vu	2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 March 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-46* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-46* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 March 2006* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

1. Claims 1-46 are pending. Claims 47-48 are cancelled.

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 3/31/06 has been entered.

Specification

3. The amendment filed 3/31/06 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

Amendments to the Specification:

Please amend the "Abstract" portion of the application as follows:

A method and interface module for communicating messages with a remote location and to provide access to an at least one intelligent electronic device (IED) operably connected to a communication network. The interface module is comprised of a central processing unit and an operating system operating the central processing unit. A network interface is operably connected with the communication network. A protocol task processes communication on the network according to first and second [[a]] protocol stacks, wherein messages are assigned to either the first or second protocol stack. Messages assigned to the first protocol stack have a higher priority than messages assigned to the second protocol stack. A set of application tasks communicates with the protocol task for responding to an incoming message from the communication network and initiating an outgoing message to the communication network. An interconnection bus with an interface driver is operably connected with the at least one IED.

On page 3 of the application, please amend paragraph 2 as follows:

Another object of the invention of the invention is directed to an interface module for communicating messages with a remote location and toprovide access to an at least one intelligent electronic device (IED) operably connected to a communication network. The interface module is comprised of a central processing unit and operating system operating the central processing unit. A network interface is operably connected with the communications network. A protocol task processes communication on the network according to first and second [[a]] protocol stacks, wherein messages are assigned to either the first or second protocol stack. Messages assigned to the first protocol stack have a higher priority than messages assigned to the second protocol stack. A set of application tasks communicates with the protocol task for.

Drawings

The informal drawings are not of sufficient quality to permit examination. Accordingly, replacement drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to this Office action. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action.

Applicant is given a TWO MONTH time period to submit new drawings in compliance with 37 CFR 1.81. Extensions of time may be obtained under the provisions of 37 CFR 1.136(a). Failure to timely submit replacement drawing sheets will result in ABANDONMENT of the application.

i.e.: the new drawing filed 3/31/06 adds the new subject matter: the second TCP/IP stack 11 (Fig 2 and Fig 4).

Applicant is required to cancel the new matter in the reply to this Office Action.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-46 are rejected under 35 U.S.C. 103(a) as being unpatentable overKaranam et al [Karanam 6,266,713 B1] in view of Rakavy et al [Rakavy 6,317,789 B1].

4. As per claim 30, Karanam discloses A control system for allowing a user access at a remote location through a communication network, to information and data contained in an electrical network control system, the control system comprising:

means for coupling the remote location to the communication network, the coupling means including a Web browser for interacting with the communication network [Karanam, a remote node and Internet gateway, col 4 lines 60-67];

a Web site associated with the electrical network control system and accessible through the communication network [Karanam, Internet gateway 36, Fig 1];

means for linking the electrical network control system to the Web site, the linking means including an interface module for coupling the at least one electrical network control system IED to the communication network [Karanam, module 108 provides for viewing, organizing and analyzing unusual behavior in a power system, col 5 lines 1-64, Fig 3];

means for enabling transfer of a message between the remote location and the electrical network control system [Karanam, download message, col 6 lines 1-17]; and

means for processing the message received from the remote location over the communication network, the means for processing the message comprising a control task [Karanam, control device 24, col 3 lines 62], means for receiving a message;

means for accessing the at least one electrical network control system IED for the message [Karanam, message, col 6 lines 1-17]; and,

means for sending a response to the remote location through the communication network using an industrial communication standard Modbus over TCP/IP, wherein the control task accepts a connection, parses a Modbus message, and calls an operation system to process the Modbus message [Karanam, Modbus and Ethernet TCP/IP, Fig 2, col 4 lines 14-59].

Karaname also taught the automatically processes [Karanam, col 5 lines 33,51]. However Karanam does not explicitly detail

an electrical network control system having an at least one intelligent electronic device (IED)

In the same endeavor, Rakavy discloses a method and apparatus for select message and other information from a computer network including remote network, FTP, Internet, TCP/IP, matching high priority categories and platform capabilities are selected for downloading [Rakavy, col 10 lines 5-17] by using an intelligent software agent or TCP/IP Polite agent [Rakavy, col 13 lines 12-30]

Therefore it would have been obvious to an ordinary skill in the art at the time the invention was made to incorporate the intelligent software agent as taught by Rakavy into the Karanam's apparatus in order to utilize the control over Internet.

Doing so would provide a better interaction with user, especially in a power management control system and dynamic Data exchange server [Karanam, col 1 lines 10].

5. As per claim 31, Karanam-Rakavy disclose the control task includes means for processing the message received from the remote location over the communication network [Karanam, control devices 24, a remote node 38, Fig 1]; accessing data on the at least one IED; and, sending back a response [Karanam, transaction between server and device, col 12 lines 55].

6. As per claim 32 Karanam-Rakavy disclose the control task further includes means for initiating the message allowing the IED to communicate with the remote location over the communication network [Karanam, control devices 24, a remote node 38, Fig 1].

7. As per claim 9 Karanam-Rakavy disclose An interface module for communicating messages with a remote location and to provide access to an at least one intelligent electronic device (IED) operably connected to a communication network, the interface module comprising:

a central processing unit; an operating system operating the central processing unit; a network interface for communicating with the communication network [Karanam, a host computer 12, Ethernet TCP/IP protocol, Fig 1];

a protocol stack for managing the communication on the network; a protocol task for processing the communication according to the protocol stack [Karanam, Ethernet gateway 60 provides connection between Ethernet TCP/IP and Modbus networks, Fig 2]; and,

a set of application tasks, comprising a control task and communicating with the protocol task for responding to an incoming message from the communication network and initiating an outgoing message to the communication network using an industrial communication standard Modbus over TCP/IP, wherein the control task accepts a connection, parses a Modbus message, and calls the operation system to process the Modbus message [Karanam, Modbus and TCP/IP, col 4 lines 14-60].

8. Claims 10-11 contain the identical limitations set forth in claims 31-32. Therefore claims 10-11 are rejected for the same rationale set forth in claims 31-32.

9. As per claim 22 Karanam-Rakavy disclose A control system for allowing a user access at a remote location through a communication network, to information and data contained in an electrical network control system having an at least one intelligent electronic device (IED) [Rakavy, an intelligent software agent or TCP/IP Polite agent, col 13 lines 12-30], the control system comprising:

means for coupling the remote location to the communication network, the coupling means including a Web browser for interacting with the communication network [Karanam, a remote node and Internet gateway, col 4 lines 60-67];

a Web site [Rakavy, web sites, col1 lines 36-50] associated with the electrical network control system and accessible through the communication network [Karanam, a remote node and Internet gateway, col 4 lines 60-67];

means for linking the electrical network control system to the Web site, the linking means including an interface module for coupling the at least one IED to the communication network [Karanam, module 108 provides for viewing, organizing and analyzing unusual behavior in a power system, col 5 lines 1-64, Fig 3];

first and second protocol stacks for enabling transfer of a message between the remote location and the electrical network control system, wherein the message is assigned to one of the first and second protocol stack according to a type of the message [Karanam, Modbus and Ethernet TCP/IP, Fig 2, col 4 lines 14-59]; and,

means for processing the message received from the remote location over the communication network wherein a message assigned to the first protocol stack is processed before has a higher priority than a message assigned to the second protocol stack, the means for processing the message comprising means for receiving a message [Rakavy, matching the user's high priority categories, col 10 lines 5-17];

means for accessing the at least one IED for the message [Rakavy, an intelligent software agent or TCP/IP Polite agent, col 13 lines 12-30]; and, means for sending a

response to the remote location through the communication network [Rakavy, the user's response to advertisements on web sites, col 3 lines 52-59].

10. As per claim 23 Karanam-Rakavy disclose the communication network is a worldwide Internet network using an Internet Protocol (IP) [Rakavy, an intelligent software agent or TCP/IP Polite agent, col 13 lines 12-30].

11. As per claim 24 Karanam-Rakavy disclose the interface module operates as a Web site on the Internet, the interface module having a global IP address [Rakavy, web sites, col 3 lines 52-59].

12. As per claim 25 Karanam-Rakavy disclose the interface module comprises a network driver for receiving the message from the Web browser on the Internet and for sending a response back to the Web browser [Rakavy, web site, col 3 lines 52-59].

13. As per claim 26 Karanam-Rakavy disclose the message transfer enabling means comprises a protocol task using a Transmission Control Protocol (TCP) [Rakavy, TCP/IP Polite agent, col 13 lines 12-30].

14. As per claim 27 Karanam-Rakavy disclose the protocol task implements a dual TCP stack [Rakavy, TCP/IP stack, col 7 lines 52].

15. As per claim 28 Karanam-Rakavy disclose the dual TCP stack comprises one stack capable of handling TCP/IP messages with a higher priority than the other stack [Rakavy, matching the user's high priority categories, col 10 lines 5-17].

16. As per claim 29 Karanam-Rakavy disclose the message processing means comprises a control task for processing a message exchange over the communication network between a remote application and the at least one IED using the industrial communication standard Modbus over TCP/IP [Karanam, Modbus and Ethernet TCP/IP, Fig 2, col 4 lines 14-59].

17. As per claim 33 Karanam-Rakavy disclose the data message processing means includes a FTP server task for processing a File Transfer Protocol (FTP) [Rakavy, FTP, col 2 lines 35-40].

18. As per claim 34 Karanam-Rakavy disclose the FTP server task accepts a connection; parses an FTP message; and, calls the operating system to process the FTP message [Rakavy, FTP, col 2 lines 35-40].

19. As per claim 35 Karanam-Rakavy disclose the FTP message allows a user at the remote location to download a file through the Internet for updating the operating software within the at least one IED associated with the electrical network control system [Rakavy, FTP, col 2 lines 35-40].

20. As per claim 36 Karanam-Rakavy disclose the FTP message allows a user at the remote location to upload through the Internet a file for obtaining data records from the at least one IED associated with the electrical network control system [Rakavy, FTP, col 2 lines 35-40].

21. As per claim 37 Karanam-Rakavy disclose the data message processing means includes a HTTP server task for processing a Hypertext Transport Protocol (HTTP) to provide access to the remote Web browser [Rakavy, web sites, col 3 lines 52-59].

22. As per claim 38 Karanam-Rakavy disclose the HTTP task accepts a connection; parses an HTTP message; and, calls the operating system to process the HTTP message [Rakavy, web sites, col 3 lines 52-59].

23. As per claim 39 Karanam-Rakavy disclose the HTTP message allows a user at the remote location to view the electrical network control system from a browser connected to the Internet [Rakavy, web sites, col 3 lines 52-59].

24. As per claim 40 Karanam-Rakavy disclose the HTTP message allows a user at the remote location to write to the electrical network control system from a browser connected to the Internet [Karanam, read/write, col 6 lines 40].

25. As per claim 41 Karanam-Rakavy disclose the HTTP message allows a user at the remote location to view IED data from a browser connected to the Internet [Karanam, viewing, col 5 lines 25].

26. As per claim 42 Karanam-Rakavy disclose the HTTP message allows a user at the remote location to write IED data from a browser connected to the Internet [Karanam, read/write, col 6 lines 40].

27. As per claim 43 Karanam-Rakavy disclose a Java message allows a user at the remote location to view IED data from a browser connected to the Internet [Karanam, viewing, col 5 lines 25].

28. As per claim 44 Karanam-Rakavy disclose a Java message allows a user at the remote location to write IED data from a browser connected to the Internet [Karanam, read/write, col 6 lines 40].

29. As per claim 45 Karanam-Rakavy disclose an ActiveX message allows a user at the remote location to view IED data from a browser connected to the Internet [Karanam, viewing, col 5 lines 25].

30. As per claim 46 Karanam-Rakavy disclose an ActiveX message allows a user at the remote location to write IED data from a browser connected to the Internet [Karanam, read/write, col 6 lines 40].

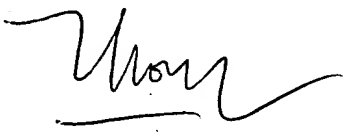
31. Claims 1-21 contain the identical limitations set forth in claims 22-46. Therefore claims 1-21 are rejected for the same rationale set forth in claims 22-46.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thong H. Vu whose telephone number is 571-272-3904. The examiner can normally be reached on 6:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on 571-272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Thong Vu
Primary Examiner
Art Unit 2142



THONG VU
PRIMARY EXAMINER
TECHNOLOGY CENTER 2100